



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/542,491

07/15/2005

Richard Jonathan Miller

7758-0026

5306

73552

7590

03/17/2008

Stolowitz Ford Cowger LLP  
621 SW Morrison St  
Suite 600  
Portland, OR 97205

EXAMINER

DOWLING, WILLIAM C

ART UNIT

PAPER NUMBER

2851

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,491	<b>Applicant(s)</b> MILLER, RICHARD JONATHAN	
	<b>Examiner</b> William C. Dowling	<b>Art Unit</b> 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-12, 14-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-12, 14-20, 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sekiguchi (5,798,864) in view of Schaefer et al. (7,094,502).

Sekiguchi discloses a projection device comprising:

A coherent light source (101), which may be a laser source;

An EASLM (203) addressed with diffraction images generated by means computer

(105);

Optics (103, 104) for directing and magnifying the diffracted images to a screen (9).

Figures 9 and 10 disclose the use of plural differently colored coherent light sources for use with a single or multiple EASLM's. Each sequentially colored image may be interpreted as block, three colored blocks forming a single image "frame". It would have been obvious to one skilled in the art at the time of the invention to apply the concept of Sekiguchi et al. to alternate known types of illumination systems so long

as a full color image is formed because such modification is the substitution of a particular EASLM addressing means , as taught by Sekiguchi, within known structures.

In a sequential system the frame rate of the SLM would be greater than that of the viewable image formed at the screen because each color represents 1/3 of a frame so that the frame rate of the SLM is 3 times that of the full color image formed at the screen...

With regard to Claims 7-9, 12, 16-19, it is well known to store images within computer means for delivery to modulation system as noted in applicant's admission on Page 2. As such it would have been obvious to provide such computer controls means in order to allow for the projection of various images without the necessity of having to create them individually when desired.

Schaefer et al. (7,094,502) teaches that diffraction images may be encompassed by the term holographic image. This reference is provided for that teaching since the term is not utilized in Sekiguchi.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 5, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable Sekiguchi (5,798,864) and Schaefer et al. (7,094,502) in view of Suh (5,805,244).

Sekiguchi (5,798,864) and Schaefer et al. (7,094,502) discloses the invention substantially as claimed but does not specify the use of plural panels or sections for forming different color component images and combining them for full color image formation

Suh teaches the illumination of multiple displays with colored lights and the combination and projections of colored modulated lights to form a full color image. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of the combination by providing plural imaging devices to form a combined color image on a projection surface.

#### ***Response to Arguments***

5. Applicant's arguments filed 12/11/07 have been fully considered but they are not persuasive. Applicant's amendment to the claims are not considered to distinguish over the prior art.

6. Applicant's request to provide evidence of obviousness to use computer control of the images is met by applicant's own description of the prior art on Page 2 Lines 1-10 wherein computer control is used to SLM's. One of ordinary skill in the art would have clearly recognized that computer control could also be used as the means to write image data to alternate types of SLM's. The claims remain written very broadly and the term "block" may be interpreted as encompassing any image block forming an

image or a sequential portion of an image. Thus, the claims continue to read upon the prior art

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Dowling whose telephone number is 571-272-2116. The examiner can normally be reached on MON-THURS.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Dowling/

Primary Examiner, Art Unit 2851

Application/Control Number: 10/542,491  
Art Unit: 2851

Page 6